



California State Fire Marshal CODE INTERPRETATION

Date Issued	May 16, 2007	Interpretation	06-005
Topic	School Fire Alarm Systems - Automatic Detection Above Ceilings		
Code Section(s)	CFC 1006.2.4.2.2.1 NFPA-72 (1999) Section 2-1.3.2.1- Total (Complete) Coverage		
Requested by	Ellen Lesov		

The 2001 California Fire Code (November 15, 2002 Supplement) states:

1006.2.4.2.2.1.1 [For SFM] Automatic Detection.

Smoke detectors shall be located at the ceiling of every room and area. Where the ceiling creates a “ceiling –plenum or a space above the ceiling for non-environmental air, automatic sprinklers shall be installed to protect such spaces of building that house and serve students from kindergarten through twelfth grade (K-12) and are cited on a new public school campus as defined in Section 215.

Heat detectors shall be installed in such space when sprinklers are not installed. Heat detectors shall be installed and maintained in accordance with NFPA-72 as amended in Article 91

Where the ceiling is attached directly to the underside of the roof structure, automatic smoke detectors shall be installed on the ceiling only. Smoke detectors are not required in non-accessible areas as defined in Section 210”.

Question #1: Please confirm or clarify whether an Automatic Detection System shall be provided in compliances with NFPA-72 (1999), Section 2-1.4.2.1 “Total (complete) Coverage”.

No, a “total coverage” automatic detection system as defined in NFPA 72 (1999) is not required throughout the occupancy. The code only requires smoke detectors to be located on the ceilings of every room and area, and in ceiling-plenums where the ceiling-plenum is utilized for environmental air. In addition,

heat detectors are required to be installed in such areas where fire sprinklers and smoke detectors are not located. Detector spacing and installation shall be in accordance with NFPA 72.

Question #2: *If the answer to Question #1 is “YES”, does this indicate that Exception 1: “If inaccessible areas contain combustible materials, they shall be made accessible and shall be protected by detector(s)” will apply.*

Not Applicable

Question #3:

If the answer to Question #2 is “YES”, does this indicate that if there are small concealed (inaccessible) spaces over rooms areas such as soffits, space over small rooms that exceed 50 Square Feet in area and contain combustible materials, they shall be made accessible and shall be protected by detector(s)”? (NFPA-72 section 2-1.4.2.1. Exception #2c)

Not Applicable

Question #4:

Please clarify whether in the last statement California Fire Code (2001), Section 1006.2.4.2.2.1.1 [For CFM] Automatic Detection: “Smoke detectors are not required in non-accessible areas as defined in section 210”, reference section should be 215 instead of 210.

Yes, CFC Section 215 is the correct section number, defining “non-accessible areas”, and not Section 210.

Question #5:

Please clarify whether in the last statement Section CFC (2001) Section 1006.2.4.2.2.1.1 [For SFM] Automatic Detection “Smoke detectors are not required in non-accessible areas as defined in section 210”, referring to non-accessible areas which contain combustible materials.

The intent of this section is to clarify that smoke detectors are not required to be installed in “non-accessible areas”, as defined in CFC, Article 2 (Section 215).